

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US03/31825

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : H04B 1/66  
US CL : 375/240.01-240.27

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 375/240.01-240.27

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
EAST

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,160,844 A (WILKINSON) 12 Dec 2000, fig.7.	1-17
Y	US 5,428,399 A (ROBINSON et al.) 27 June 1995, see entire document	1-17

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	
"A"	document defining the general state of the art which is not considered to be of particular relevance
"E"	earlier application or patent published on or after the international filing date
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O"	document referring to an oral disclosure, use, exhibition or other means
"P"	document published prior to the international filing date but later than the priority date claimed

Date of the actual completion of the international search

23 August 2004 (23.08.2004)

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